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## RAW SEQUENCE LISTING

DATE: 07/24/2000

PATENT APPLICATION: US/09/508,552

TIME: 13:33:33

Input Set : A:\152801.app

Output Set: N:\CRF3\07242000\I508552.raw

ENTERED

3 <110> APPLICANT: Berzofsky, Jay A.  
4 Belyakov, Igor M.  
5 Derby, Michael A.  
6 Kelsall, Brian L.  
7 Strober, Warren  
8 THE GOVERNMENT OF THE UNITED STATES OF AMERICA, as  
10 <120> TITLE OF INVENTION: MUCOSAL CYTOTOXIC T LYMPHOCYTE RESPONSES  
12 <130> FILE REFERENCE: 368200PCSEQ  
C--> 14 <140> CURRENT APPLICATION NUMBER: US/09/508,552  
C--> 15 <141> CURRENT FILING DATE: 2000-06-12  
17 <150> PRIOR APPLICATION NUMBER: 60/058,523  
18 <151> PRIOR FILING DATE: 1997-09-11  
20 <150> PRIOR APPLICATION NUMBER: 60/074,894  
21 <151> PRIOR FILING DATE: 1998-02-17  
23 <160> NUMBER OF SEQ ID NOS: 20  
25 <170> SOFTWARE: PatentIn Ver. 2.0  
27 <210> SEQ ID NO: 1  
28 <211> LENGTH: 35  
29 <212> TYPE: PRT  
30 <213> ORGANISM: Human immunodeficiency virus type 1  
32 <400> SEQUENCE: 1  
33 Glu Gln Met His Glu Asp Ile Ile Ser Leu Trp Asp Gln Ser Leu Lys  
34 1 5 10 15  
36 Pro Cys Val Lys Arg Ile Gln Arg Gly Pro Gly Arg Ala Phe Val Thr  
37 20 25 30  
39 Ile Gly Lys  
40 35  
43 <210> SEQ ID NO: 2  
44 <211> LENGTH: 39  
45 <212> TYPE: PRT  
46 <213> ORGANISM: Human immunodeficiency virus type 1  
48 <400> SEQUENCE: 2  
49 Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala  
50 1 5 10 15  
52 Pro Pro Ile Ser Gly Gln Ile Arg Arg Ile Gln Arg Gly Pro Gly Arg  
53 20 25 30  
55 Ala Phe Val Thr Ile Gly Lys  
56 35  
59 <210> SEQ ID NO: 3  
60 <211> LENGTH: 39  
61 <212> TYPE: PRT  
62 <213> ORGANISM: Human immunodeficiency virus type 1  
64 <400> SEQUENCE: 3  
65 Arg Asp Asn Trp Arg Ser Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile  
66 1 5 10 15  
68 Glu Pro Leu Gly Val Ala Pro Thr Arg Ile Gln Arg Gly Pro Gly Arg  
69 20 25 30

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71 Ala Phe Val Thr Ile Gly Lys
72      35
75 <210> SEQ ID NO: 4
76 <211> LENGTH: 48
77 <212> TYPE: PRT
78 <213> ORGANISM: Human immunodeficiency virus type 1
80 <400> SEQUENCE: 4
81 Ala Val Ala Glu Gly Thr Asp Arg Val Ile Glu Val Val Gln Gly Ala
82 1      5      10      15
84 Tyr Arg Ala Ile Arg His Ile Pro Arg Arg Ile Arg Gln Gly Leu Glu
85      20      25      30
87 Arg Arg Ile Gln Arg Gly Pro Gly Arg Ala Phe Val Thr Ile Gly Lys
88      35      40      45
94 <210> SEQ ID NO: 5
95 <211> LENGTH: 42
96 <212> TYPE: PRT
97 <213> ORGANISM: Human immunodeficiency virus type 1
99 <400> SEQUENCE: 5
100 Asp Arg Val Ile Glu Val Val Gln Gly Ala Tyr Arg Ala Ile Arg His
101 1      5      10      15
103 Ile Pro Arg Arg Ile Arg Gln Gly Leu Glu Arg Arg Ile Gln Arg Gly
104      20      25      30
106 Pro Gly Arg Ala Phe Val Thr Ile Gly Lys
107      35      40
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111 <211> LENGTH: 30
112 <212> TYPE: PRT
113 <213> ORGANISM: Human immunodeficiency virus type 1
115 <400> SEQUENCE: 6
116 Asp Arg Val Ile Glu Val Val Gln Gly Ala Tyr Arg Ala Ile Arg Arg
117 1      5      10      15
119 Ile Gln Arg Gly Pro Gly Arg Ala Phe Val Thr Ile Gly Lys
120      20      25      30
123 <210> SEQ ID NO: 7
124 <211> LENGTH: 32
125 <212> TYPE: PRT
126 <213> ORGANISM: Human immunodeficiency virus type 1
128 <400> SEQUENCE: 7
129 Ala Gln Gly Ala Tyr Arg Ala Ile Arg His Ile Pro Arg Arg Ile Arg
130 1      5      10      15
132 Arg Ile Gln Arg Gly Pro Gly Pro Arg Ala Phe Val Thr Ile Gly Lys
133      20      25      30
139 <210> SEQ ID NO: 8
140 <211> LENGTH: 35
141 <212> TYPE: PRT
142 <213> ORGANISM: Human immunodeficiency virus type 1
144 <400> SEQUENCE: 8
145 Glu Gln Met His Glu Asp Ile Ile Ser Leu Trp Asp Gln Ser Leu Lys
146 1      5      10      15

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148 Pro Cys Val Lys Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr
149          20          25          30
151 Thr Lys Asn
152          35
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157 <212> TYPE: PRT
158 <213> ORGANISM: Human immunodeficiency virus type 1
160 <400> SEQUENCE: 9
161 Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala
162   1          5          10          15
164 Pro Pro Ile Ser Gly Gln Ile Arg Arg Ile His Ile Gly Pro Gly Arg
165          20          25          30
167 Ala Phe Tyr Thr Thr Lys Asn
168          35
171 <210> SEQ ID NO: 10
172 <211> LENGTH: 39
173 <212> TYPE: PRT
174 <213> ORGANISM: Human immunodeficiency virus type 1
176 <400> SEQUENCE: 10
177 Arg Asp Asn Trp Arg Ser Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile
178   1          5          10          15
180 Glu Pro Leu Gly Val Ala Pro Thr Arg Ile His Ile Gly Pro Gly Arg
181          20          25          30
183 Ala Phe Tyr Thr Thr Lys Asn
184          35
187 <210> SEQ ID NO: 11
188 <211> LENGTH: 48
189 <212> TYPE: PRT
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192 <400> SEQUENCE: 11
193 Ala Val Ala Glu Gly Thr Asp Arg Val Ile Glu Val Val Gln Gly Ala
194   1          5          10          15
196 Tyr Arg Ala Ile Arg His Ile Pro Arg Arg Ile Arg Gln Gly Leu Glu
197          20          25          30
199 Arg Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys Asn
200          35          40          45
206 <210> SEQ ID NO: 12
207 <211> LENGTH: 42
208 <212> TYPE: PRT
209 <213> ORGANISM: Human immunodeficiency virus type 1
211 <400> SEQUENCE: 12
212 Asp Arg Val Ile Glu Val Val Gln Gly Ala Tyr Arg Ala Ile Arg His
213   1          5          10          15
215 Ile Pro Arg Arg Ile Arg Gln Gly Leu Glu Arg Arg Ile His Ile Gly
216          20          25          30
218 Pro Gly Arg Ala Phe Tyr Thr Thr Lys Asn
219          35          40
222 <210> SEQ ID NO: 13

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223 <211> LENGTH: 30
224 <212> TYPE: PRT
225 <213> ORGANISM: Human immunodeficiency virus type 1
227 <400> SEQUENCE: 13
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231 Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys Asn
232   20           25           30
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236 <211> LENGTH: 31
237 <212> TYPE: PRT
238 <213> ORGANISM: Human immunodeficiency virus type 1
240 <400> SEQUENCE: 14
241 Ala Gln Gly Ala Tyr Arg Ala Ile Arg His Ile Pro Arg Arg Ile Arg
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244 Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys Asn
245   20           25           30
248 <210> SEQ ID NO: 15
249 <211> LENGTH: 15
250 <212> TYPE: PRT
251 <213> ORGANISM: Human immunodeficiency virus type 1
253 <400> SEQUENCE: 15
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255   1           5           10           15
258 <210> SEQ ID NO: 16
259 <211> LENGTH: 10
260 <212> TYPE: PRT
261 <213> ORGANISM: Human immunodeficiency virus type 1
263 <400> SEQUENCE: 16
264 Arg Gly Pro Gly Arg Ala Phe Val Thr Ile
265   1           5           10
268 <210> SEQ ID NO: 17
269 <211> LENGTH: 20
270 <212> TYPE: PRT
271 <213> ORGANISM: Human immunodeficiency virus type 1
273 <400> SEQUENCE: 17
274 Glu Gln Met His Glu Asp Ile Ile Ser Leu Trp Asp Gln Ser Leu Lys
275   1           5           10           15
277 Pro Cys Val Lys
278   20
281 <210> SEQ ID NO: 18
282 <211> LENGTH: 24
283 <212> TYPE: PRT
284 <213> ORGANISM: Human immunodeficiency virus type 1
286 <400> SEQUENCE: 18
287 Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala
288   1           5           10           15
290 Pro Pro Ile Ser Gly Gln Ile Arg
291   20

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TIME: 13:33:33

Output Set: N:\CRF3\07242000\I508552.raw

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296 <212> TYPE: PRT
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299 <400> SEQUENCE: 19
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301 1 5 10 15
303 Glu Pro Leu Gly Val Ala Pro Thr
304 20
307 <210> SEQ ID NO: 20
308 <211> LENGTH: 33
309 <212> TYPE: PRT
310 <213> ORGANISM: Human immunodeficiency virus type 1
312 <400> SEQUENCE: 20
313 Ala Val Ala Glu Gly Thr Asp Arg Val Ile Glu Val Val Gln Gly Ala
314 1 5 10 15
316 Tyr Arg Ala Ile Arg His Ile Pro Arg Arg Ile Arg Gln Gly Leu Glu
317 20 25 30
319 Arg

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L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date